

25 Years of Minimally Invasive Surgery in Moinesti City

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The interest of physicians to "look into the internal organs" has existed since the ancient time. The first described endoscopy was by Hippocrates. He made reference to a rectal speculum. The credit for modern endoscopy belongs to Bozzini. He developed a light conductor which he called "Lichtleiter" to avoid the problems of inadequate illumination. In 1853, Desormeaux first introduced the "Lichtleiter" of Bozzini to a patient. Many developments, which occurred independently but almost simultaneously, produced breakthroughs for endoscopy and laparoscopy that were bases for modern instruments. In 1901, Kelling coined the term "coelioscope" to describe the technique that used a cystoscope to examine the abdominal cavity of dogs. In 1910, Jacobaeus used the term "laparothorakoskopie" for the first time. In 1938, Veress developed the spring-loaded needle for draining ascites and evacuating fluid and air from the chest. Its current modifications make the "Veress" needle a perfect tool to achieve pneumoperitoneum during laparoscopic surgery. In 1970, Hasson developed a technique performing laparoscopy through a miniature leparotomy incision. The first solid state camera was introduced in 1982 that was the start of "video-laparoscopy". In 1981 Kurt Semm performed first laparoscopic appendectomy. Within a year, all standard surgical procedures were performed laparoscopically. Although the invention of the first solid state camera was unveiled in 1982, it was not until 1987 before Philippe Mouret would perform the first laparoscopic cholecystectomy. This event ignited the world of laparoscopic surgery. Today, 98% of all gallbladders removed surgically are removed with the laparoscopic approach. The shift from the open method of gallbladder removal to the laparoscopic method took fewer than 5 years to occur. During the past decade, a dynamic evolution in Minimally Invasive Surgery has occurred that has no equal in the history of surgery. Today, few abdominal surgical procedures escape the laparoscopic approach.

In Romania, the beginning of laparoscopic surgery was also difficult, with few surgeons having the openness, courage and technical possibilities to try a new method, still viewed with skepticism in the medical world.

The first laparoscopic operation was performed in 1991, in Constanta by the team led by Prof. Dr. Vasile Sarbu and Dr. Vladimir Botnariuc, assisted by Prof. Bernard Descottes (France). The team's attention was attracted from the first laparoscopes performed and presented in Marseille, the city with which Constanta was twinned, and following the training sessions carried out by the team in several centers in France (Marseille, Amiens, Brest, Limoges), it was born was the laparoscopic surgery in Romania, only 4 years after its appearance in the world (marked by Philippe Mouret in 1987 in Lyon). Also here appeared the first training center in laparoscopy, between April 1- May 15, 1992).



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Shortly afterwards, in the center of Cluj-Napoca, the team led by Prof. Dr. Sergiu Duca performed the first laparoscopic cholecystectomy on December 14, 1992. Also

here is established the largest national training center in laparoscopic techniques.



In the First Clinique of Surgery from Iasi, on March 31, 1993, under the leadership of Prof. Dr. Eugen

Tarcoveanu, the first laparoscopic cholecystectomy is performed.



Timisoara stands out in 1993 through the team led by Prof. Dr. M. Teodorescu, Bucharest in 1994 under the leadership of Prof. Dr. Cornel Dragomirescu and Oradea also in 1994 through the team of Prof. Dr. G. N. Ionescu.

together with the anesthesia team led by Dr. Tincu Eugen and Dr. Grigoras Ioana , performs for the first time in Bacau County, on July 14 , 1995, the first laparoscopic cholecystectomy, being the first non-university hospital in the country to start using laparoscopic techniques.

In 1995, in the Moinesti City Hospital, the surgical team led by Dr. Adrian Cotirlet, together with Prof. Dr. Eugen Tarcoveanu and Dr. Bradea Costel from Iasi,



Although the technical difficulties due to the equipment and instruments were important, thanks to the sustained efforts of the team of surgeons and anesthetists, with the material support of the Petrom team, minimally invasive surgery evolved in Moinesti City Hospital, starting from 8 interventions in the first year: cholecystectomy, diagnostic laparoscopy, appendicectomy and adhesiolysis. In the

following year, approximately 20 interventions were performed, constantly progressing so far both numerically and in multiple fields - gynecology, thoracic surgery, bariatric surgery, oncological surgery, abdominal wall surgery, pediatric surgery.



Prof. Dr. Marc van Baden , Prof. Dr. Adrian Cotirlet , Dr. Ivan Ion

Famous surgeons visited and operated in the Moinesti hospital, bringing added value and inspiration to the surgical teams. The medical team of the Moinesti hospital in collaboration with renowned doctors performed for the first time numerous minimally invasive surgeries, with continuous interest in novelty and progress: 1995 Laparoscopic cholecystectomy - Prof. Univ. Dr. Tarcoveanu Eugen; 2006 Gastric by-pass - Prof. Dr. Iordache Nicolae; 2007 Gastric Achalasia Prof. Dr. Iordache Nicolae; 2007 Laparoscopic TEP inguinal hernia repair – Conf. Dr. Bradea Costel; 2008 Hepatic hydatid cyst – Prof. Dr. Georgescu Stefan ; 2009 Transvaginal cholecystectomy (NOTES) – Prof. Dr. Antonelo Forgione, Prof. Dr. Ramon Villalonga; 2010 SILS Cholecystectomy – Prof. Ramon Villalonga; 2010 Gastric sleeve – Prof. Dr. Ramon Villalonga; Prof.

Lopez – Fort; 2010 Hiatal hernia – Prof. Dr. Iordache Nicolae, Dr. Andrei Stoica; 2011 Rectosigmoid carcinoma – Prof. Dr. Iordache Nicolae; 2011 Splenic epidermoid cyst - Prof. Dr. Iordache Nicolae ; 2011 Laparoscopic hysterectomy – Conf. Dr. Bradea Costel; 2014 Small bowel tumor – Prof. Dr. Unc Dumitru; 2018 Laparoscopic assisted thyroidectomy – Conf. Dr. Bradea Costel. We can tell some testimonies of those who visited and contributed to the development of laparoscopic surgery in the Moinesti hospital : “ It is an incredible positive evolution in the last years, in the entire hospital, especially in the operating room. The future looks very good for the population of Moinesti with a modern and high-performance hospital. Congratulations “



25/07/2009 Dr. Antonelo Forgione (Milano)

“Today is a wonderful day! I performed the first transvaginal cholecystectomy in Moinesti. We thank the entire team of the hospital, especially Adrian Cotirlet, Professor Iordache and Roman Villalonga for their help. I hope to see you again next year for another great operation “. ‘Yesterday was an important day in this hospital. first SILS procedure (Single Incision Laparoscopic Surgery). We are excited to heal and improve surgical techniques. See you soon “

To date, almost 13,000 minimally invasive surgeries have been performed, covering a wide range of digestive pathologies (hepatobiliary, acute traumatic and non-traumatic abdomen, surgery for abdominal parietal defects, esogastric and colorectal pathology) as well as metabolic, gynecological and orthopedic surgery.

The main indicators: incidents and accidents, perioperative morbidity and mortality as well as the conversion rate were included in the data stipulated in the literature. All surgeons and anesthetists, together with the nurses from the operating room, attended advanced courses



1/07/2009 Dr. Ramon Villalonga (Spain)

in laparoscopic technique in the country (Iasi, Cluj-Napoca, Bucharest) and abroad (France, Belgium, Germany, Italy, USA). Over time, a complex team of surgeons and anesthetists was formed, which communicated the results obtained at over 140 congresses and symposia in Romania and abroad.

The endowment of the operating rooms has known a continuous evolution, currently the Moinesti Hospital has 4 laparoscopy kits in 4 operating rooms using the latest equipment for performing in optimal conditions the surgical interventions such as arthroscopies, thoracoscopies, digestive laparoscopic surgery, endourology and ENT endoscopy.

The electrosurgical equipment has been constantly modernized, the Moinesti Municipal Emergency Hospital is currently equipped with the usual equipment used in surgical interventions (monopolar, bipolar), with special electrosurgical systems that use ultrasound (Harmonic), electric current (Enseal) and argon coagulation.



The intensive care unit is a true partner, permanently supporting the desire to progress towards a modern, minimally invasive surgery, focused on the needs and benefits of the patient. Currently the section includes 21 beds, each with its own monitor, 8 fans, central monitoring station and hemodialysis machine. In the last quarter of a century, Moinesti Hospital has been an



important element of laparoscopic surgery in Romania, constantly having a modern vision, in continuous adaptation to new procedures in the area of minimally invasive surgery. Laparoscopic procedures with well known advantages and difficulties, gave us satisfaction, justifying the preferential option over open interventions.

